

What is claimed is:

1           1. A fluorescent lamp comprising:  
2           a hermetically sealed lamp vessel; and  
3           a phosphor layer attached to a part of an inner surface  
4 of the lamp vessel,  
5           wherein a thickness of the phosphor layer near an edge  
6 thereof gradually and smoothly decreases towards the edge.

1           2. The fluorescent lamp of Claim 1,  
2           wherein the phosphor layer is formed so that a slope  
3 is created near the edge, the slope having an acute angle  
4 with respect to the part of the inner surface of the lamp  
5 vessel.

1           3. The fluorescent lamp of Claim 2, further comprising:  
2           a discharge material that contains mercury, and is  
3 enclosed in the lamp vessel; and  
4           a coil that is provided outside the lamp vessel, and  
5 generates a magnetic field so as to make the discharge material  
6 induce a plasma discharge,  
7           wherein the plasma discharge causes the mercury to emit  
8 ultraviolet light, and the emitted ultraviolet light is  
9 converted into visible light by means of a phosphor material  
10 included in the phosphor layer.

1           4. The fluorescent lamp of Claim 3,  
2           wherein the lamp vessel is made up of a glass bulb in  
3           a substantially spherical form, and an internal tube that  
4           is provided in the glass bulb and has a concave portion in  
5           a tube-like form,  
6           wherein the phosphor layer is formed on an inner surface  
7           of the glass bulb.

1           5. The fluorescent lamp of Claim 4,  
2           wherein the coil is provided in the concave portion.

1           6. The fluorescent lamp of Claim 5,  
2           wherein the phosphor layer is obtained by drying a mixture  
3           of an aqueous solution of polyethylene oxide and phosphor  
4           powders.